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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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OPTV/MEYERTONS MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C. P.O. BOX 398 AUSTIN, TX 78767-0398			EXAMINER SHANG, ANNAN Q	
			ART UNIT 2424	PAPER NUMBER
			NOTIFICATION DATE 04/09/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent_docketing@intprop.com
ptomhkk@gmail.com
rrankin@intprop.com

Office Action Summary

Application No.

09/827,358

Applicant(s)

DUREAU ET AL.

Examiner

ANNAN Q. SHANG

Art Unit

2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 and 58-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 and 58-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/02)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/16/10 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7, 42, 43, 58, 59 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Inagaki et al (6,337,715)** in view of **Matsakis et al (7,590,644)** .

Regarding claims 1 and 58, **Inagaki** teaches a receiver for processing data, where the receiver comprises:

A front end configured to receive a broadcast signal including a format definition expressed in a text form where the format definition comprises a description of grammar

which defines a syntax of a target language (fig. 7+, col. 1, lines 30-63 and col. 15, line 36-57) and

A generic data processing engine (fig. 7), configured to: receive the format definition, receive additional data which conforms to the target language and process the additionally received data in accordance with the format definition (col. 1, lines 30-63 and col. 15, line 36-57: the library has the decoding software for decoding the additional information), note that a header and data, both of which creates the format definition, where the header identifies the name of the library and attributes in combination with the data reads on a format definition. Inagaki further discloses that it is possible to provide data as text.

Inagaki is silent as to where the format definition is expressed in Backus Naur Form.

However in the same field of endeavor, **Matsakis** discloses a method and apparatus of streaming data transformation using code generator and translator, where a flexible transformation mechanism is provided that facilitates generation of translation machine code on the fly to a desired machine code or a standard form, e.g. Backus Naur Form (BNF), to enable the target device to process accordingly (see abstract, figs. 2-7, 8+, col. 1, lines 41-col. 2, line 58, col. 3, line 12-col. 4, line 1+, col. 6, line 19-col. 7, line 1+ and col. 14, line 54-col. 15, line 43).

Hence it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Matsakis into the system of Inagaki to

translate from one form of text a desired form of text to enable a target device or receiver to process accordingly.

Regarding claim 2, Inagaki teaches the receiver receiving a broadcast including the received data (col. 15, ll. 61-67).

Regarding claim 3, Inagaki teaches the engine receiving the format definition from the broadcast (col. 15, ll. 61-67).

Regarding claim 4, Inagaki teaches the receiver receiving the broadcast including the data (col. 15, ll. 61-67).

Regarding claims 7, 59 and 72, Inagaki teaches the definition including a software program, a format specification interface which includes a syntax initialization engine and a semantics initialization engine (col.15, lines 36-67) and inherently includes descriptions of semantics of the format in order to decode the particular format.

Regarding claims 42 and 67, Inagaki teaches television related information (col. 15, ll. 36-49).

Regarding claim 43, Inagaki teaches service information (col. 15, ll. 36-49).

4. Claims 5-11, 26-27, 59-61 and 70-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over to **Inagaki et al (6,337,715)** in view of **Matsakis et al (7,590,644)** as discussed above and further in view of **Program Guide for Digital Television ATSC Standard (ATSC)**.

Regarding claim 5, Inagaki as modified by Matsakis, teach the receiver receiving the data, and teaches different transmission means, but is silent on receiving a

multicast. ATSC teaches receiving a multicast including data and wherein the engine is further configured to receive the format definition from the multicast derived from a point-to-multipoint multicast of EPG data (see pg. 1, para. 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Inagaki as modified by Matsakis by using multicast as taught by ATSC in order to provide different transport mediums to permit the user to access data.

Regarding claim 6, Inagaki as modified by Matsakis, teach receiving the format definition, but is silent on receiving data via a multicast. ATSC teaches receiving a multicast including data and wherein the engine is further configured to receive the format definition from the multicast derived from a point-to-multipoint multicast of EPG data (see pg. 1, para. 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Inagaki as modified by Matsakis by using multicast as taught by ATSC in order to provide different transport mediums to permit the user to access data.

Regarding claims 7-11 and 59-61, Inagaki as modified by Matsakis, is silent on the definition including a description of syntax, description of semantics, a semantic description associating at least one identifier with received data, wherein the syntax and semantics are described in a first language, configured to produce an internal representation of the syntax and semantics.

ATSC teaches a description of the syntax and semantics of the format, wherein the semantic description associated at least one identifier with the data, wherein the syntax and semantics are described in a first language, configured to produce an internal representation of the syntax and semantics (table 5.2 - pg. 7, table 5.5 - pg. 16, table 5.6 - pg. 18, table 5.7 - page 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Inagaki as modified by Matsakis by the definition including a description of syntax, description of semantics, a semantic description associating at least one identifier with received data, wherein the syntax and semantics are described in a first language, configured to produce an internal representation of the syntax and semantics as taught by ATSC in order to effectively define the protocol for sending data, thereby enabling the receiving device to decode the received data.

Regarding claims 26 and 27, Inagaki as modified by Matsakis, is silent on the syntax as a first language and the semantics as a second language, and producing an internal representation of the syntax and semantics.

ATSC teaches a description of the syntax and semantics of the format, wherein the syntax and semantics are described in a first language and second language (as the claim does not require the languages to be different), configured to produce an internal representation of the syntax and semantics (table 5.2 - pg. 7, table 5.5 - pg. 16, table 5.6 - pg. 18, table 5.7 - page 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Inagaki as modified by Matsakis by the syntax as a

first language and the semantics as a second language, and producing an internal representation of the syntax and semantics as taught by ATSC in order to effectively define the protocol for sending data, thereby enabling the receiving device to decode the received data.

As to claim 70, **Inagaki** teaches a receiver for processing data, where the receiver comprises:

A front end configured to receive a broadcast signal including a format definition expressed in a text form where the format definition comprises a description of grammar which defines a syntax of a target language (fig.7+, col.1, lines 30-63 and col. 15, line 36-57) and

A generic data processing engine (fig. 7), configured to: receive the format definition, receive additional data which conforms to the target language and process the additionally received data in accordance with the format definition (col.1, lines 30-63 and col. 15, line 36-57: the library has the decoding software for decoding the additional information).

Inagaki is silent as to where the format definition is expressed in Backus Naur Form.

However in the same field of endeavor, **Matsakis** discloses a method and apparatus of streaming data transformation using code generator and translator, where a flexible transformation mechanism is provided that facilitates generation of translation machine code on the fly to a desire machine code or a standard form, e.g. Backus Naur Form (BNF), to enable the target device to process accordingly (see abstract, figs.2-7,

8+, col.1, lines 41-col.2, line 58, col.3, line 12-col.4, line 1+, col.6, line 19-col.7, line 1+ and col.14, line 54-col.15, line 43).

Hence it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Matsakis into the system of Inagaki to translate from one form of text a desired form of text to enable a target device or receiver to process accordingly.

Inagaki as modified by Matsakis, is silent on the definition including a description of syntax, description of semantics, a semantic description associating at least one identifier with received data, wherein the syntax and semantics are described in a first language, configured to produce an internal representation of the syntax and semantics.

ATSC teaches a description of the syntax and semantics of the format, wherein the semantic description associated at least one identifier with the data, wherein the syntax and semantics are described in a first language, configured to produce an internal representation of the syntax and semantics (table 5.2 - pg. 7, table 5.5 - pg. 16, table 5.6 - pg. 18, table 5.7 - page 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Inagaki as modified by Matsakis by the definition including a description of syntax, description of semantics, a semantic description associating at least one identifier with received data, wherein the syntax and semantics are described in a first language, configured to produce an internal representation of the syntax and semantics as taught by ATSC in order to effectively define the protocol for sending data, thereby enabling the receiving device to decode the received data.

Claims 71-72, the claimed "A computer program product for processing formatted data, comprising a computer usable storage medium having readable code embodied therein is composed of the same structural element that were discussed with respect to the rejection of claim 70.

5. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over to **Inagaki et al (6,337,715)** in view of **Matsakis et al (7,590,644)** as discussed above and further in view of **Hopkins (6,286,133)**

Inagaki as modified by Matsakis discloses a decoding software for decoding a plurality of broadcasting formats, but silent as to where the decoder which includes a lexical analyzer and parser.

However, Hopkins discloses method and apparatus for strategic compilation of source programs into two or more target languages and further discloses a lexical analyzer and parser (col.2, line 1+ and col.4, line 6+).

Hence it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Hopkins into the system of Inagaki as modified by Matsakis to process and convert a sequence of characters into other program or software character sequence(s) or format as desired.

Response to Arguments

6. Applicant's arguments with respect to claims 1-43 and 58-73 have been considered but are moot in view of the new ground(s) of rejection. The amendment to

the claims necessitated the new ground(s) of rejection discussed above. This office action is non-final.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Winkelman et al (2006/0265366) disclose system and method for modifying output of a computer program without source code modifications

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ANNAN Q. SHANG** whose telephone number is **(571)272-7355**. The examiner can normally be reached on **7:00am-4:00pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free)**. If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, **call 800-786-9199 (IN USA OR CANADA) or 571-272-1000**.

/Annan Q Shang/
Primary Examiner, Art Unit 2424

Annan Q. Shang